The economic and social viability of Tanzanian Wildlife Management Areas

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Village game scouts, Burunge WMA. Photo Alex Wunsch

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Introduction

This policy brief contributes to assessing the economic and social viability of Tanzania's Wildlife Management Areas (WMAs) through preliminary findings by the 'Poverty and ecosystem Impacts of Tanzania's Wildlife Management Areas' (PIMA) project, focusing on benefits, costs, and their distribution between State, community and household.

WMAs constitute Tanzania's national community-based natural resource management programme for wildlife, whereby groups of villages set aside land for wildlife conservation and tourism. Nineteen WMAs currently operate; a planned 38 in all will total 7% of Tanzania's surface area. The central objectives of the WMA policy are to "increase participation of local communities in management of wildlife resources; enable local communities to derive benefits from wildlife resources; and enhance conservation of wildlife resources" (WWF, 2014).

This note addresses WMAs' economic and social viability from local communities' perspective. WMAs promise secure land tenure, revenue and regulated access to/ use of key natural resources. In some cases, WMAs partially deliver these ends. However, most WMAs currently earn little tourism revenue while imposing considerable costs on local people. Many WMAs have generated land-based conflicts (state vs communities; WMAs vs tourist operators; tourist operators vs communities; between and within communities). WMA administration costs match or exceed participating villages' revenues, and focus mostly on enforcement while failing to mitigate wildlife damage or deliver meaningful benefits.

Benefits

Direct income: The collection of revenues earned by individual WMAs, and their distribution among state, WMA and villages, are governed by State regulations (URT, 2012) (Fig1, Box1). For Enduimet and Burunge, two of the Tanzanian WMAs with the greatest tourism appeal (WWF, 2014), revenues accruing to villages work out at USD 0.6 and USD 3.5 per capita/year (Box 1), but most WMAs have negligible

Policy Recommendations

To be economically and socially viable, WMAs must

- Be established following processes of consultation and planning that follow the spirit of Free, Prior and Informed Consent.
- Allow villages to revisit the terms of agreement, including changing the management plan.
- Allow for access to key resources within the WMA in ways that support both local livelihoods and environmental sustainability, through access to dry season grazing in northern Tanzania, and to forest products and land for non-permanent cultivation in southern Tanzania.
- Build on benefit distribution and taxation formulae favouring villages over the State, and on co-funding for community-wide benefits as opposed to anti-poaching and patrolling measures.

tourism revenue or none at all. These very low per capita revenues are invested in community development (e.g. education, infrastructure).

Indirect economic benefits: WMAs protect rangelands against fragmentation, conversion to cultivation, and against loss of mobility crucial to migratory wildlife and livestock (Galvin et al., 2008), translating into direct economic benefits through livestock production and tourism attractions (enhanced landscape; wildlife numbers). WMAs also attract donor money supporting conservation and development activities, valuable contributions, but highlighting WMAs' dependence on philanthropy and their lack of financial sustainability.

Costs

Opportunity costs: Much production is lost through restricted access to key resources. In the northern WMAs, people's main source of income is from grazing mobile livestock herds on rangelands. Vastly under-rated in official statistics, pastoral livestock production rivals national agricultural GDP from crops (Behnke and Muthami, 2011), alongside providing resilient local livelihoods. Together, livestock, crop and non-timber forest products (NTFPs) sustain house-

BOX1

Distribution of WMA income and benefits: Enduimet and Burunge WMA

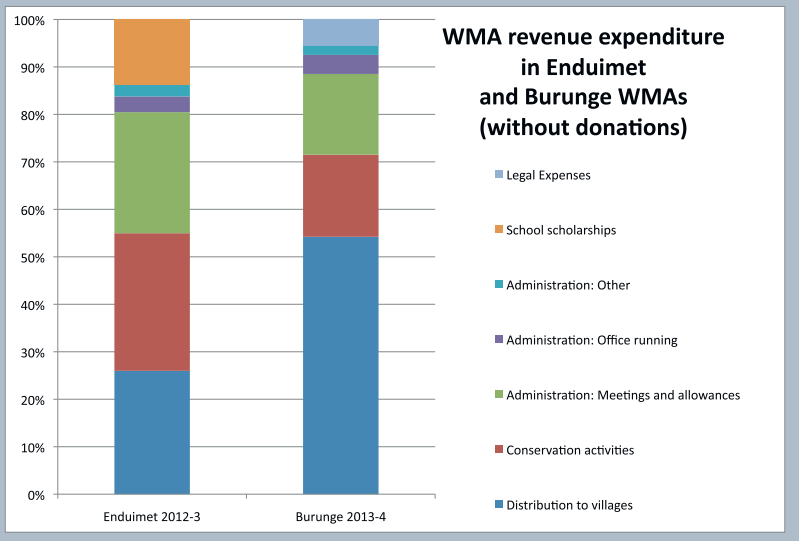
In 2012/13, Enduimet WMA received ~USD 129,000 as its share of revenues following State and district government taxation, which topslices roughly one-third of game viewing and half of hunting income (URT, 2012; WWF, 2014). Enduimet WMA financial reports from that year account for expenditures amounting to ~ USD 108,241 and roughly three-quarters of this financed WMA administration conservation costs, including village game scouts, while one-quarter was distributed to the 9 member villages (equivalent to ~ USD 0.6/capita/year).

Burunge earned ~USD 248,500 in 2013/14 after government taxation, and distributed half of its total expenditure to its member villages (~ USD 3.5/capita/year).

WMA member villages in principle receive equal shares of the revenue distributed to them. However, this equal sharing is problematic. Different villages contribute different areas of land to the WMA; each village has its own characteristics – some have considerable farmland, few wildlife or wildlife habitat, contribute little land and experience little wildlife damage, while others have little or no farmland, more wildlife habitat, contribute more land and suffer more wildlife damage. Thus, in a context of very unequal opportunity and direct costs of WMAs, equal benefit sharing results in net inequality and in some villages being seen as free-riding on the efforts of others.

Enduimet CBO distributes WMA scholarships directly to students, while in Burunge, individual village governments decide how to spend WMA revenues on education (building classrooms, issuing scholarships). Where infrastructure investments appear to benefit the whole community, individual-level benefits, such as meeting allowances, medical or educational bursaries, and job opportunities, benefit only a small subset of village residents, often AA members or VGS and their families.

Additional donations from NGOs, such as WWF, AWF, Honeyguide Foundation, Alat, Fisong, contribute funds to the WMAs, usually earmarked for administration, anti-poaching, conservation and crop protection, alongside USAID's cash for work. These restricted funds amounted to USD 92,100 (85% of Enduimet's own revenues) and USD 50,400 (20% of Burunge's own revenues) in Enduimet (2012-3) and Burunge (2013-4), respectively.



Compiled from official CBO reports, using USD/TSH end-of-fiscal-year exchange rates.

hold incomes averaging up to a couple of thousand USD/ year (Homewood et al., 2009, 2012). In Enduimet, 90% of village lands were initially set aside for the WMA, representing major opportunity costs. Following considerable conflict and negotiation, Enduimet WMA now sets aside 60% of total village lands; cattle have conditional grazing access.

In other WMAs like Burunge, rising human and livestock populations (due to migration, not least people displaced from rangelands elsewhere) alongside exclusion of livestock, increase pressure to use WMA lands set aside through a hasty process ten years back (Bluwstein et al., in review; Igoe and Croucher, 2007). Some WMA villages have lost substantial income from and good investor relations with pre-WMA direct deals (e.g. Sinya in Enduimet). Investors struggle to deal with multiple payments at different levels (e.g. Shumata in Enduimet); with multiple villages now at loggerheads, and often disgruntled villagers.

Set-up and Administration costs: WMAs receive planning and implementation support from donor-funded projects and conservation NGOs. Once established, considerable running costs focus especially on enforcement (game scout salaries, vehicles, communications, weapons), generally subsidised by external donors. In principle, village game scouts (VGS) help villagers facing wildlife damage to people, crops and livestock. In practice VGS focus mainly on anti-poaching; wildlife damage (including human deaths, crop and livestock losses) is neither appropriately investigated nor compensated. WMA income nominally for community development in fact supports anti-poaching informant networks. And while WMA enforcement against poaching and livestock grazing receives support from NGOs and appears effective, entrepreneurs defaulting on WMA contracts or payments appear to avoid sanctions (eg Shumata in Enduimet) (Homewood, in press).

Social and political costs translate into barriers to economic viability:
There is widespread confusion over WMA and village boundaries (Bluwstein and Lund, in preparation), undermining mobility, coping strategies, and production systems crucial to people's economic welfare. GIS shapefiles held by different government agencies and NGOs do not agree either among themselves or with villages' participatory maps, generating conflict.

Poor process and lack of transparency in WMA implementation mean local people do not realize the full implications of the WMA for production and livelihoods (Kangalawe and Noe, 2012; Moyo et al., in review).

Local people's sense of powerlessness in the WMA process, fear and anger following mis-targeted anti-poaching campaigns (IPS, 2014), and inability to have grievances addressed, undermine support for and legitimacy of WMAs, and often trigger costly legal conflicts or violent confrontations (Loliondo, Enduimet, Burunge, Randileni) (Homewood, in press; Bluwstein et al., in review; Loveless, 2014; BBC, 2013; Benjaminsen and Bryceson, 2012).

Conclusion

We argue that the process of consultation, planning and implementation needs to be re-thought with respect to local conditions in each individual case. State and WMAs need to give communities more power to negotiate. Communities should be able not only to revisit terms of agreement, but to withdraw from WMAs that are unworkable and/or impose unacceptable costs.

Tenure and access have been poorly managed in many WMAs in Tanzania to date. Provided northern WMAs guarantee both protection of communal tenure against encroachment (Benjaminsen and Bryceson, 2012; BBC, 2013) and dry season access (successfully contested in Enduimet WMA), hitherto sceptical and resistant populations (eg Burunge) could be won over. Southern WMAs should prioritise securing access to farmland and agricultural inputs, as compensation for farmland lost to WMAs.

Grossly skewed distribution formulae for benefit sharing and taxation need radical revision in favour of communities. Local economic viability could be strengthened through better state co-funding for WMA-derived community initiatives (eg. salaries for health or education personnel staffing WMA revenue-funded facilities).

WMAs prioritize rule enforcement without addressing social and political underpinnings of people's behaviour, targeting petty offenders, trespassers and bushmeat hunters through anti-poaching activities that further alienate local communities, while failing to address central corruption and big players. For many, WMAs lack legitimacy and invite trespass. WMAs should prioritise protecting people's assets from rising human-wildlife conflict.

To sum up, social and economic viability in WMAs depends on:

1. genuinely participatory planning and local support, revised benefit sharing and taxation formulae, security of tenure and drought grazing access in the pastoral north, sustained access and tenure to sufficient agricultural land and forests in southern and western WMAs

2. proven tourism potential through interest and earnings (currently completely lacking in the Selous-Niassa Corridor WMAs; highly uncertain in northern WMAs e.g. Makame)

3. revenue to and distribution within local communities proven to compensate for opportunity costs

4. If these criteria are not met, we strongly advise not to push for WMA establishment

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Livestock grazing in WMA in northern Tanzania. Photo Jens Friis Lund

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